

WHAT IS CLAIMED IS:

1. A chair comprising:  
a seat including a seat bottom portion; and  
a tray including a central portion and a raised rim surrounding the central portion,  
wherein the tray is removably supported at a front of the chair above the seat bottom portion so as to be accessible by the seat occupant, and  
wherein a front portion of the rim has an undulate height profile.
2. A chair according to claim 1, wherein the front portion of the rim comprises a medial portion flanked by two rest portions that are lower than the medial portion.
3. A chair according to claim 2, wherein the front portion of the rim comprises two shoulder portions that are higher than the two rest portions, each of the rest portions being flanked by the medial portion and a respective shoulder portion.
4. A chair according to claim 3, wherein the rest portions have gently curved upper surfaces and rounded upper edges.
5. A chair according to claim 4, further comprising a removable, flexible tray insert that generally conforms to and covers the central portion of the tray and at least the immediately adjacent portions of the rim.
6. A chair according to claim 5, wherein the central portion of the tray and the portion of the insert that covers the central portion of the tray are substantially flat.
7. A chair according to claim 5, wherein the insert includes a rim to conform to and cover the rim of the tray.
8. A chair according to claim 5, wherein the insert is self-supporting, whereby the insert can be stably supported on any flat surface as a rimmed place mat when removed from the tray.

9. A chair according to claim 1 in the form of a child high chair.
10. A tray comprising:  
a central portion; and  
a raised rim surrounding the central portion, and  
wherein a portion of the rim has an undulate height profile.
11. A tray according to claim 10, wherein a front portion of the rim has an undulate height profile.
12. A tray according to claim 10, wherein the tray is adapted to be removably supported at a front of a chair for access by the chair occupant.
13. A tray according to claim 10, wherein the front portion of the rim comprises a medial portion flanked by two rest portions that are lower than the medial portion.
14. A tray according to claim 13, wherein the front portion of the rim comprises two shoulder portions that are higher than the two rest portions, each of the rest portions being flanked by the medial portion and a respective shoulder portion.
15. A tray according to claim 14, wherein the rest portions have gently curved upper surfaces and rounded upper edges.
16. A removable insert for a tray comprising:  
a central portion; and  
a raised rim surrounding the central portion, the insert being a self-supporting, flexible member that is shaped generally to conform to and cover a central portion of the tray.
17. A removable insert according to claim 16, wherein the insert is shaped generally to conform to and cover at least immediately adjacent portions of a rim of the tray.

18. A removable insert according to claim 17, wherein the raised rim of the insert is shaped generally to cover completely the rim of the tray.

19. A removable insert according to claim 16, wherein the central portion of the insert is substantially flat, whereby the insert can be stably supported on any flat surface as a rimmed place mat when removed from the tray.

20. A chair comprising:  
a seat including a seat bottom portion and a seat back portion; and  
a tray removably supported at a front of the chair above the seat bottom portion so as to be accessible by the seat occupant,  
wherein the seat comprises a bearing surface that adjustably supports the tray for fore-and-aft movement, and the tray comprises a top side, an underside, and at least one wheel mounted to the underside to rotate, the wheel supporting the tray for fore-and-aft movement on the bearing surface.

21. A chair according to claim 20, wherein the seat comprises an occupant restraint at the front of the chair above the seat bottom portion, and the bearing surface comprises a portion of the top surface of the occupant restraint.

22. A chair according to claim 21, wherein the occupant restraint comprises at least one recessed portion so as to function as a lower tray when the tray is removed.

23. A chair according to claim 20, wherein the tray comprises a plurality of wheels mounted to the underside to rotate, the wheels supporting the tray for fore-and-aft movement on the bearing surface.

24. A chair according to claim 23, wherein the bearing surface comprises a central longitudinal portion and two lateral longitudinal portions, the tray has two laterally spaced wheels and a central wheel, and each wheel rides on a respective longitudinal portion.

25. A chair according to claim 21, wherein the central longitudinal portion of the bearing surface has a recessed track for the center wheel.

26. A tray adapted to be removably supported at a front of a chair for access by the chair occupant, the tray comprising:

a top side;

an underside, and

at least one wheel mounted to the underside to rotate for movably supporting the tray on a bearing surface of the chair.

27. A tray according to claim 26, wherein the tray comprises a plurality of wheels mounted to the underside to rotate about parallel axes for movably supporting the tray on a bearing surface of the chair.

28. A tray according to claim 27, wherein the plurality of wheels comprises three wheels, two of the wheels being laterally spaced and rotatable about a common axis, and the third wheel being centrally located and rotatable about an axis offset from the common axis.

29. A height-adjustable child high chair comprising:

a seat including a seat bottom portion and a seat back portion, the seat bottom portion having a downwardly extending leg rest portion;

a floor-engaging frame supporting the seat, the frame including a front member in supporting engagement with the leg rest portion, the leg rest portion being slidable relative to the front member; and

an adjustable support for the rear of the seat comprising adjustably engageable mating portions of the frame and the seat.

30. A height-adjustable child high chair according to claim 29, wherein the adjustably engageable mating portions comprise vertically spaced support elements carried by one of the seat and the frame, and a latch assembly selectively engageable with the support elements, the latch assembly carried by the other of the seat and the frame.

31. A height-adjustable child high chair according to claim 30, wherein the support elements comprise a toothed rack on the frame, and the latch assembly comprises a movable tooth carried by the seat that selectively engages teeth on the rack.

32. A height-adjustable child high chair according to claim 30, wherein the support elements comprise a toothed rack at each side of the frame, and the latch assembly comprises a pair of movable teeth carried by the seat, each tooth of the latch assembly selectively engaging teeth on its respective rack.

33. A height-adjustable child high chair according to claim 32, wherein the latch assembly comprises a transverse bar pivoted transversely to the seat with a tooth of the pair of movable teeth at each end thereof, and the bar includes a handle for pivoting the bar between latched and unlatched positions.

34. A height-adjustable child high chair according to claim 33, wherein the handle comprises a grip portion adapted to be engaged and supported by the fingers of one hand, and a heel portion adapted to be raised by the heel of the same hand when the grip portion is engaged, and wherein upward movement of the heel portion unlatches the teeth of the bar to permit vertical movement of the seat relative to the frame.

35. A height-adjustable child high chair according to claim 29, wherein the seat and the frame have mating guide surfaces that are in contact throughout the range of seat height adjustment and resist tilting of the seat.

36. A height-adjustable child high chair according to claim 29, comprising a handle located behind and centrally of the seat bottom portion and operatively coupled to at least one of the mating portions, wherein the handle comprises a grip portion adapted to be engaged and supported by the fingers of one hand, and a heel portion adapted to be raised by the heel of the same hand when the grip portion is engaged, and wherein upward movement of the heel portion disengages the mating portions to permit vertical movement of the seat relative to the frame.

37. A height-adjustable child high chair comprising  
a seat;  
a floor-engaging frame including opposed side portions at opposite  
sides of the seat; and  
a height-adjustable support assembly between the seat and the frame,  
the support assembly comprising:  
a toothed rack on each side portion of the frame;  
a movable latch on the seat having a tooth at each side thereof  
for selectively engaging the teeth of the respective racks; and  
a handle for moving the latch between latched and unlatched  
positions.
38. A height-adjustable child high chair according to claim 37, wherein the  
handle is centrally located on the seat.
39. A height-adjustable child high chair according to claim 37, wherein the  
latch comprises a transverse bar pivoted transversely to the seat, the handle being  
located on the bar for pivoting the bar between latched and unlatched positions.
40. A height-adjustable child high chair according to claim 39, wherein the  
handle comprises a grip portion adapted to be engaged and supported by the fingers of  
one hand, and a heel portion adapted to be raised by the heel of the same hand when  
the grip portion is engaged, and wherein upward movement of the heel portion  
unlatches the teeth to permit vertical movement of the seat relative to the frame.
41. A height-adjustable child high chair according to claim 38, wherein the  
handle comprises a grip portion adapted to be engaged and supported by the fingers of  
one hand, and a heel portion adapted to be raised by the heel of the same hand when  
the grip portion is engaged, and wherein upward movement of the heel portion  
unlatches the teeth to permit vertical movement of the seat relative to the frame.
42. A height-adjustable child high chair according to claim 37, wherein the  
seat and the frame have mating guide surfaces that are in contact throughout the range  
of seat height adjustment and resist tilting of the seat.

43. An adjustable child high chair comprising:  
a seat including a seat bottom portion and a seat back portion pivotally mounted relative to the seat bottom portion about a transverse pivot axis to move between an upright position and a recline position, the two seat portions defining a seat bight region along the seat bottom portion between a first transverse axis, where a lower edge of the seat back portion intersects the seat bottom portion when the seat back is in the upright position, and a second transverse axis, where a lower edge of the seat back portion intersects the seat bottom portion when the seat back is in the recline position,

wherein the pivot axis is located above and forwardly of the seat bight region.

44. An adjustable child high chair according to claim 43, further comprising armrest portions, wherein the seat back portion comprises lateral extensions that are pivoted to the armrest portions about the pivot axis.

45. An adjustable child high chair according to claim 44, wherein the armrest portions are integral with the seat bottom portion.

46. An adjustable child high chair according to claim 43, wherein the seat bottom portion is curved upwardly at the rear thereof, and the seat back portion is similarly curved at the bottom thereof to slide closely past the seat bottom portion throughout a range of adjustment of the seat back portion relative to the seat bottom portion.

47. An adjustable child high chair according to claim 43, comprising a releasable latch mechanism for selectively immobilizing the seat back portion in a desired position.

48. An adjustable child high chair according to claim 47, wherein the latch mechanism comprises a row of notches on the seat bottom portion, and a retractable bolt carried by the seat back portion and engageable with a selected notch.

49. An adjustable child high chair according to claim 47, wherein the latch mechanism comprises two laterally spaced rows of notches on the seat bottom portion, two retractable bolts carried by the seat back portion, each bolt engageable with a selected notch of its respective row of notches, and a handle on the seat back portion operatively connected to both bolts for simultaneous actuation of the bolts.

50. An adjustable child high chair comprising:  
a seat including a seat bottom portion and a seat back portion pivotally mounted relative to the seat bottom portion about a transverse pivot axis so that the seat back portion can move through a range of adjustment relative to the seat bottom portion, the seat back portion having a lower edge, the lower edge of the seat back portion overlapping the seat bottom portion,

wherein the pivot axis is located above and forwardly of the lower edge of the seat back portion throughout the range of adjustment.

51. An adjustable child high chair according to claim 50, further comprising armrest portions, wherein the seat back portion comprises lateral extensions that are pivoted to the armrest portions about the pivot axis.

52. An adjustable child high chair according to claim 51, wherein the armrest portions are integral with the seat bottom portion.

53. An adjustable child high chair according to claim 50, wherein the seat bottom portion is curved upwardly at the rear thereof, and the seat back portion is similarly curved at the bottom thereof to slide closely past the seat bottom portion throughout the range of adjustment of the seat back portion.

54. An adjustable child high chair according to claim 50, comprising a releasable latch mechanism for selectively immobilizing the seat back portion in a desired position.

55. An adjustable child high chair according to claim 54, wherein the latch mechanism comprises a row of notches on the seat bottom portion, and a retractable bolt carried by the seat back portion and engageable with a selected notch.



56. An adjustable child high chair according to claim 54, wherein the latch mechanism comprises two laterally spaced rows of notches on the seat bottom portion, two retractable bolts carried by the seat back portion, each bolt engageable with a selected notch of its respective row of notches, and a handle on the seat back portion operatively connected to both bolts for simultaneous actuation of the bolts.

57. An adjustable child high chair comprising:  
a seat including a seat bottom portion having a seating surface and a seat back portion having a back support surface, the seat back portion pivotally mounted relative to the seat bottom portion about a transverse pivot axis so that the seat back portion can move through a range of adjustment relative to the seat bottom portion,

wherein the pivot axis is located above the seating surface and forwardly of the back support surface throughout the range of adjustment.

58. An adjustable child high chair according to claim 57, further comprising armrest portions, wherein the seat back portion comprises lateral extensions that are pivoted to the armrest portions about the pivot axis.

59. An adjustable child high chair according to claim 58, wherein the armrest portions are integral with the seat bottom portion.

60. An adjustable child high chair according to claim 57, wherein the seat bottom portion is curved upwardly at the rear thereof, and the seat back portion is similarly curved at the bottom thereof to slide closely past the seat bottom portion throughout the range of adjustment of the seat back portion.

61. An adjustable child high chair according to claim 57, comprising a releasable latch mechanism for selectively immobilizing the seat back portion in a desired position.

62. An adjustable child high chair according to claim 61, wherein the latch mechanism comprises a row of notches on the seat bottom portion, and a retractable bolt carried by the seat back portion and engageable with a selected notch.

63. An adjustable child high chair according to claim 61, wherein the latch mechanism comprises two laterally spaced rows of notches on the seat bottom portion, two retractable bolts carried by the seat back portion, each bolt engageable with a selected notch of its respective row of notches, and a handle on the seat back portion operatively connected to both bolts for simultaneous actuation of the bolts.

64. An adjustable child high chair comprising:  
a seat including a seat bottom portion having a seating surface with a centerline and a seat back portion having a centerline, the seat back portion pivotally mounted relative to the seat bottom portion about a transverse axis so that the seat back portion can move through a range of adjustment relative to the seat bottom portion,  
wherein the pivot axis is located above the portion of the seating surface along its centerline and forwardly of the portion of the seat back portion along its centerline.

65. An adjustable child high chair comprising:  
a seat including a seat bottom portion and a seat back portion;  
a seat platform above the seat bottom portion; and  
an elevating mechanism beneath the seat platform for adjusting the height of the seat platform relative to the seat bottom portion.

66. An adjustable child high chair according to claim 65, wherein the elevating mechanism comprises a movable elevating member beneath and supporting the seat platform, and a ramped surface on at least one of the elevating member and the seat platform, whereby movement of the elevating member changes the height of the seat platform.

67. An adjustable child high chair according to claim 66, wherein the elevating member is movable fore and aft of the seat by a rotatable actuating member located at the front of the seat platform.

68. An adjustable child high chair according to claim 67, wherein the elevating member includes a slot, and the actuating member comprises a wheel having an eccentric pin engaging the slot.

69. An adjustable child high chair according to claim 67, wherein the elevating member includes a threaded hole, and the actuating member comprises a knob attached to a threaded shaft, the threaded shaft mating with the threaded hole.

70. An adjustable child high chair according to claim 65, wherein the seat platform has a hole through which a crotch restraint member can extend.

71. An adjustable child high chair comprising:  
a seat including a seat bottom portion and a seat back portion; and  
an adjustable seat assembly above the seat bottom portion, the adjustable seat assembly comprising:  
a base attached to the seat bottom portion;  
a seat platform above the base; and  
an elevating mechanism between the seat platform and the base for adjusting the height of the seat platform relative to the base.

72. An adjustable child high chair according to claim 71, wherein the elevating mechanism comprises a movable elevating member supporting the seat platform, and a ramped surface on at least one of the elevating member, the base and the seat platform, whereby movement of the elevating member changes the height of the seat platform.

73. An adjustable child high chair according to claim 72, wherein the elevating member is movable fore and aft of the seat by a rotatable actuating member located at the front of and pivoted to the base.

74. An adjustable child high chair according to claim 73, wherein the elevating member includes a slot, and the actuating member comprises a wheel having an eccentric pin engaging the slot.

75. An adjustable child high chair according to claim 73, wherein the elevating member includes a threaded hole, and the actuating member comprises a knob attached to a threaded shaft, the threaded shaft mating with the threaded hole.

76. An adjustable child high chair according to claim 71, wherein the adjustable seat assembly has a hole through which a crotch restraint member can extend.

77. A child high chair comprising:  
a seat including a seat bottom portion and a seat back portion; and  
an accessory bar pivoted to the seat about a transverse axis, the accessory bar being movable between a forward position in which the bar is disposed in front of the seat back portion for access by the seat occupant, and a retracted position in which the bar is disposed above and/or behind the seat back portion.

78. A child high chair according to claim 77, wherein the accessory bar is padded.

79. A child high chair according to claim 77, wherein the accessory bar is pivoted to the seat back portion of the seat.

80. A child high chair according to claim 77, wherein the accessory bar is generally U-shaped.